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ABSTRACT

This bibliography contains abstracts of 50 documents about evaluation of teacher training in population education. It is the second in a series of three resource bibliographies for the development of population education prcgrams in the Philippines. Included in this bibliography are abstracts of bcoks, periodical articles, ERIC documents, and unpublished theses. Most were published in the United States. Entries are arranged in the fcllowing subject areas: principles of program evaluation, methodology of program evaluation, program evaluation models, and teacher evaluation and follow-up. Within each subject area the entries are categcrized according to publication type. Each entry gives information on author, title, place of publication, publisher's name, date, and number of pages; a detailed abstract; and names of institutional libraries in the Philippines where the documents can be located. (AV)

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ABSTRACT-BIBLIOGRAPHY SERIES
Series One Part Two

EFFECTIVE EVALUATION OF TEACHER TRAINING IN POPULATION EDUCATION

Prepared by

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FOREWORD

This Abstract-Bibliography Series is a joint attempt of the Population Education Research Utilization Project and the Population Center Foundation Library to consolidate and generate a user-oriented reference or resource material base. The need to organize a system for developing data base through intensive and extensive searching, processing and storing of information through bibliography, among other vehicles, arises from the following conditions: (1) the substantial increase in the quantity and scope of research and documentation in population and related fields; and (2) the anticipated problem of handling efficiently the growing volume of information and material collection which the Foundation's Population Education Research Utilization Project and the other Research Utilization projects will be facing in the future.

This Abstract-Bibliography Series will not only systematize locating, storing, and organizing the materials but also facilitate dissemination of information. The Series provides bibliographic control to assist the Poped Research Utilization Staff, target audiences, and other interested parties in acquiring a tangible gauge of available materials in the Population Center Foundation Library. Furthermore, it also serves as a finding tool for materials produced in the various fields, including where such materials can be secured.

The first of this Abstract-Bibliography Series is on Teacher Training in Population Education. This subject was identified as a problematic area by professionals in population education through the spadework interviews conducted by the Poped RU staff. Being a user-oriented publication, all subjects to be dealt with in the Abstract-Bibliography Series will be based on information needs and recommendations of the users or the target audiences. For this first of a series, the Abstract-Bibliography will come in three parts:

Part I — Teacher Training Schemes in Population Education
Part II — Effective Evaluation of Teacher Training in Population Education
Part III — Strategies in Value Clarification in Population Education

The books, periodicals, and reports contained in each Part were used as reference materials for the three literature reviews of the same titles. The Abstract-Bibliography, together with the three literature reviews were primarily prepared and written for the professionals who will participate in the series of conferences on Population Education Research Utilization (Teacher Training) come April, May, June and July. These publications will also be available in limited circulation to other interested professionals in the population education and other related fields.

The materials contained in the Abstract-Bibliography Series include books, periodical articles, published reports found in ERIC (Education Resources Information Center), and unpublished materials-theses. For easier retrieval of the information, the names of other libraries and resource centers where some of the materials are located, have been properly identified and marked accordingly.

The Abstract-Bibliography Series will come out once a year together with the literature reviews of the same subject, in conjunction with the Population Education Research Utilization conferences.

DIRECTIONS FOR USE

This is a three-part Abstract-Bibliographic Series: Part I — Teacher Training Schemes in Population Education; Part II — Effective Evaluation of Teacher Training in Population Education; Part III — Strategies for Value Clarification in Population Education. Each part, in turn, is divided into lesser categories. Within each lesser category are the entries classified into Books, Periodical Articles, Published Reports (Educational Resources Information Center, ERIC for short) and Unpublished Materials (Theses). The entries are arranged alphabetically by author, institution or other main entry within each classification.

An abstract provides a brief summary of the purpose and content of a source document.

An abstract may either be INFORMATIVE or INDICATIVE. The informative abstract contains a statement of the author's thesis, several sentences of his development or proof, and his conclusions. It is a summary of an author's own ideas. The indicative abstract on the other hand, broadly presents the contents and format of a document. The former is a condensed duplication of the document's contents while the latter is a guide to the contents of a document.

This Series contains both types of abstracts.

The general format for most entries based on *Turabian's Manual for Theses Writing* is the following: author, title, place of publication, publisher's name, date, and number of pages.

For this series, however, we have added two items to the general format: 1) the symbol ED (for ERIC Document) with the number of a particular microfiche, and 2) the names of institutional libraries where the entry can be found, enclosed in parentheses.

Code of Institutional Libraries

The following is the code of institutional libraries where the materials abstracted here can be located. These libraries were chosen because they have a large collection of teacher training and population education materials.

AdeM	Ateneo de Manila University
DEC	Department of Education and Culture
FAPE	Fund for Assistance to Private Education
NRDCTE	National Research and Development Center in Teacher Education
PCF	Population Center Foundation
UP Ed	University of the Philippines, College of Education
UP SEC	University of the Philippines, Science Education Center

Interested parties may request extra copies of the Abstract-Bibliography Series and the materials cited in the Abstract-Bibliography from the Population Center Foundation Library. Xeroxed copies are priced at P0.70 per page.

METHODOLOGY AND STAFF

The Research Utilization: Population Education (RU PopEd) strategy consists of two processes: 1) the retrieval, transformation and communication of research findings through literature reviews and 2) feedback conferences for professionals (selected teachers, administrators, policymakers and researchers) in the field of population education with the reviews serving as springboards for discussions.

The reviews for the second cycle of conferences revolve around the problem area of teacher training, earlier identified by participants of the first cycle of conferences (held in Summer, 1975). Investigation through spadework interviews conducted in some provinces was made to ascertain *a priori* and emergent problems on teacher training. These interviews also determined the direction of an exhaustive literature search.

An exhaustive literature search was done on three topics: Teacher Training Models and Strategies, Value Clarification Strategies, and the Evaluation of Training. The search process involved making valuable contacts with individuals, resource centers or agencies which are repositories of or have access to resource materials on teacher training in population education. Bibliography listings of both local and foreign materials were solicited, from which the Staff selected those pertinent to their respective topics.

Although local materials were given high priority, difficulty was experienced in locating research studies or articles which were directly applicable to the topics being developed. This underscores the need for a systematized way of locating, storing, and organizing locally available materials in this research area, not to mention the need for new research.

Acknowledging the usefulness of a communication and dissemination scheme for reference materials available on the conference topics, abstracts of these materials were made to serve as supplement to the above-mentioned literature reviews. Aimed to reconstruct the original study, research abstracts were written to contain the study's objectives, methodology, findings and conclusions, and lastly, recommendations.

The package you now see is a product of the joint efforts of the RU:PopEd and the Library. The RU:PopEd Staff performed the spadework procedures and furnished the literature reviews and abstracts while the PCF Library ordered the reference materials needed. It will also be serving as repository for a majority of the materials contained herein. Both staffs contributed to the planning and supervising the technical details entailed in producing this output.

We wish to acknowledge the work of the following individuals on this first of an Abstract-Bibliography Series:

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PRINCIPLES OF PROGRAM EVALUATION

Book

Kilpatrick, Donald L.

"Evaluation of Training". *Training and Development Handbook,* Robert L. Craig and Lester R. Bittel (Eds.). New York: McGraw-Hill Book Co., 1967. p. 87-112. (PCF)

The chapter clarifies the meaning of evaluation and suggests techniques for conducting evaluation. Four steps are defined in detail with examples and guideposts. These steps are: (1) Step 1 – Reaction. Reaction is defined as how well the trainees liked a particular program. Evaluating in terms of reaction is the same as measuring the feelings of the conferees. To evaluate effectively, it is suggested that written comment sheets designed to obtain desired reactions be used. The form should be so designed that comments can be tabulated and quantified. To make the evaluation more meaningful, the trainer's appraisal of the program should supplement the written comment sheet. (2) Step 2 – Learning. Learning is defined as the principles, facts and techniques which were understood and absorbed by the trainees. Where the program is aimed at teaching skills, classroom demonstrations and presentations can be used to measure learning. Where principles and facts are the objectives of the training programs, a paper and pencil test is suggested. (3) Step 3 – Behavior. To evaluate training programs in terms of behavioral changes, a systematic appraisal should be made of on-the-job performance on a before and after basis by the person receiving the training, his superior, subordinates and peers. A statistical analysis could be made to compare before and after performance and related changes to the training program. (4) Step 4 – Results. The evaluation of training programs in terms of results has progressed at a very low rate. Thus, the need for specifying result objectives in their highest degree of specificity.

Descriptors:
Evaluation; Evaluation techniques.

Periodicals

Caro, Francis

"Issues in the Evaluation of Social Programs," Review of Educational Research XLI (April, 1971), 87-113 (AdeM)

The paper is an extensive literature review on the use of methods and concepts of behavioral research on program evaluation. The first part surveys the literature on basic considerations such as: (1) the definitions of evaluative research; (2) the varying methodological approaches; (3) the role of evaluative research in program development and administration; and (4) distinctions between various kinds of research, e.g. science, research, evaluation.

The second part is concerned with organizational matters. It discusses practical problems in: (1) establishing and maintaining the evaluative research role; (2) administering evaluative research; and (3) utilizing results.

Lastly, it presents methodological issues in measurement and design pertinent to evaluation studies. It finally recommends that both evaluative researchers and policy-makers take mutual steps in making this type of research a key concern in social programming.

Descriptors:
Program evaluation and planning; Research methodology

Dyer, Henry S.

"Evaluating Educational Programs: A Symposium." *The Urban Review,* III (February, 1969), 10-12. (AdeM)

In this paper the author differentiates educational evaluation from research related to education. The task of evaluation is threefold: (1) to clarify the mission of education in terms of what it is and perhaps ought to be; (2) to collate and analyze the best information obtainable on how well educational institutions and programs are fulfilling their mission; and, (3) to identify ways by which the institutions and programs might be approved. Research as commonly practiced is theoretical in emphasis. If evaluation is to have an informed impact on educational decisions it must be prepared to tap the methods and findings of research. The author then elaborates by discussing the responsibilities of the evaluator in collecting all possible information he can possibly obtain.

The author concludes that if the evaluative process is to provide usable information on how educational programs are working, it must not be seen as a one-shot affair, but as a continuous operation concerned with all the on-going activities of the educational system and their interconnections. Its functions should be creative as well as analytical. It should generate ideas for new programs calculated to meet the needs of the children whom schools are supposed to serve.

Descriptors:
Evaluation; Educational objections; Institutional administration; Institutional role; Evaluation methods; Educational development.

Irvine, David

"Meeting the Demands of Accountability," *NASSP Bulletin.* LV (November, 1971). 80-86. (AdeM)

The purpose of the article is to suggest that by organizing and analyzing educational information more systematically, we can better meet demands for accountability.

This systematic and integrated manner of organizing and analyzing information is termed the "evaluation system". It can assist individuals in various decison-making levels in determining extent to which goals have been realized and how resources can most effectively be allocated.

Foundations of a local evaluation system can be laid by integrating and analyzing data gathered by various components of existing evaluation programs and disseminating these to its potential users. The information can then be used in diagnosing individual student's needs, improving programs, allocating resources, and identifying potential crisis.

The evaluation system suggested can be ideally created through a developmental process by undergoing the following steps: preparing the staff, conducting an inventory of data now being collected; determining what kinds of information the various users of the system would find useful; determining how information can best be collected, processed, used and stored, and obtaining assistance to develop an overall plan.

The information obtained from the evaluation system developed can subsequently be used to contribute to more effective decision making.

Descriptors:
Decision making; Program evaluation and planning.

Mann, John

"Evaluating Educational Programs. A Symposium." *The Urban Review,* (February, 1962), 12-13 (AdeM)

The author asserts that from a technical viewpoint, evaluation is a fundamental research activity. It can be conducted with as much precision as any form of research. However, he admits that certain problems in executing a scientific design under naturalistic conditions exist. He then differentiates evaluation and research in terms of the information it provides.

Certain constraints are given in evaluating programs making use of the research methodology. The greater the effect toward technical elegance and unambiguous findings, the greater the investment required in time, expense and care. A compromise must be sought in practice. It must be clear to the evaluator as well as those administering the program under evaluation, what they can realistically exact from the process. The better the study, the longer it takes, and consequently, the less usefulness it may have. Conversely, the sloppier the procedure, the more likely it is to provide information on questions of interest even though this data will be of doubtful validity. Within this morass of cost reward equations, the scientist and the administrator must treat a precarious path in order to attain precision and practicality.

Descriptors:
Educational programs; Evaluation.

Sergiovanni, Thomas
"Synergistic Evaluation", *Teachers College Record*, Vol. 75. No. 4: 540-552. May, 1974. (AdeM)

The article advocates an approach to evaluation based on humanistic synergy. It does not describe an evaluation system per se but rather the conditions of humanistic synergy which any evaluation system, regardless of its origins and characteristics should meet in order to be more effective.

Five explicit descriptions of the condition are presented. It further dwells on the main evaluation process of comparing output intents (goals) and means intents (plans). It proceeds by discovering discrepancies between observations on both goals and plans.

The conditions for synergistic evaluation are: (1) The evaluation program recognizes the need for integrity and harmony of design among the school's management system, organization system and educational system; (2) It recognizes the need for compatibility between means and ends on the school's purposes and its processes; (3) It is seen as a subjective enterprise which sharpens differences and legitimizes them in the form of optional educational programs; (4) It is not limited to anticipated goals and meanings but recognizes the importance of discovering goals and meanings; and (5) It enjoys widespread identification and commitment from teachers and administrators.

An hourglass configuration represents a need assessment model. It incorporates principles of humanistic synergy by relating educational goals and objectives drawn from needs. The model works in a broad context of the school's organizational management system as well as its educational design.

The final evaluation process is represented by a quadrat grid orienting goals and plan with observations. An approach wherein one approximates, shifts directions, tends towards or otherwise improves the match between goal and observations is viewed as a developmental process towards the end of lowering discrepancies.

Policymakers, administrators possess an essential role in initiating humanistic approaches in educational design. The conditions, model and evaluation approach presented here conform to this overriding principle.

Descriptors:
Evaluation techniques; Educational attitudes; Administrators.

Wrightstone, Wayne
"Evaluating Educational Programs: a Symposium". *The Urban Review*, III (February, 1969), 5-6 (AdeM)

A differentiation between evaluation and research is given. Research is primarily concerned with theories and sophisticated treatment of data. Evaluation, on the other hand is interested in appraising a program at a set deadline. Thus, it cannot engage in the luxury of tedious and meticulous treatment of data.

The author stresses the importance of a two-way communication between evaluator and project coordinator. He also discusses the points at which insights and recommendations of the evaluators are sought: (1) initial conferences held between the project director and the evaluator before the evaluation is actually conducted. Here project objectives are jointly established; (2) medial conferences where an interim report on progress and recommendations are required at medial point (3) a final report with post-program recommendations. The weight of recommendations should be on the fundamental merits of the program, as it is operating, on possible ways to increase the success of the program in operation.

Descriptors:
Evaluation method; Educational development; Educational objections.

Published
Reports

Berty, Ernest

"A Guide to the Evaluation of Pilot Programs. Charleston: West Virginia State Department of Education, January, 1970. 19 p. ED 054 195 (AdeM, PCF)

There are numerous evaluation models as: Tylerian model, Context, Input Process and Product (CIPP) model from Ohio University, and Stake's composite-goal model, etc. This guide makes no attempt to adhere to any particular model but draws from several of them in an attempt to provide a frame of reference in the development of an evaluation plan for pilot programs. The emphasis of this guide is on the development of an evaluation design. Construction of instruments or the analysis and interpretation of results, however, is not discussed.

Evaluation requires a systematic procedure for marshalling and presenting objective evidence to support any judgment about the effectiveness of a program. Its ultimate justification rests in determining how much is accomplished relative to the program objective, the changes which occured, and whether or not the changes were the ones which were intended. The potential evaluator should also be alerted to the importance of assessing the process or effort associated with the program. An analysis of the process can reveal why a program is not working as well as expected. Locating the cause of the failure can result in modifying the program while it is in progress so it will work. This procedure is a pertinent part of the evaluation plan. It requires a breakdown and assessment of the component parts of the program and the identification of these aspects which contribute or detract from the overall effect of the program. The paper includes numerous references in the selected bibliography for further in-depth study of any aspect of evaluation.

Descriptors:
Community characteristic; Data collection; Educational change; Educational programs; Evaluation techniques; Guides; Pilot projects; Post testing; Pretesting; Program costs; Program design; Program development; Program effectiveness; School environment.

Cooke, Robert A. and Duncan, Robert B.

Evaluative Research as a Component in Organizational Change Strategies. Symposium paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois, April, 1972. 21 p. ED 064 344 (AdeM, PCF)

This paper focuses on four specific areas: (1) evaluation and evaluation research and some approaches to evaluation; (2) functional consequences of evaluation; (3) experimental designs for evaluation, unanticipated consequences of evaluation, problems in the use of experimental designs in evaluation, and (4) a process evaluation model. Some of the positive and negative aspects of evaluating programs are discussed. The authors recommend a process evaluation model where organizational members, through the Organizational change committee, work in a collaborative relationship with the change agent team in the design and implementation of the evaluation.

This evaluation technique has two objectives: (1) it provides the change agent team with a continuous monitoring of the impact of their interventions and has the potential for helping the change agent team modify their interventions when they are not effective; (2) it creates a step-by-step documentation of the change program and its impact on the system that can be used not only to assess the program, but also to plan for future changes. Furthermore, the evaluation technique documents what worked and did not work, so that future programs can benefit from past experiences.

Descriptors:
Educational change; Evaluation methods; Formative evaluation; Models; Organizational change; Program evaluation; Research.

Greenberg, James and Others
Toward the Development of a Comprehensive Evaluation Design. Preliminary draft of presentation for American Educational Research Association Special Interest Group in Teacher Education. Maryland: Teacher Education Center, January, 1972. 17 p. ED 965 595 (AdeM, PCF)

Basic questions essential to the construction of conceptual frameworks for evaluation are asked by the author. The questions evidently put evaluation in a decision making context. In attempting to provide answers, the evaluative design should reveal not only where the training effect is in terms of its original and present conception; but should also show whether forms and goals are in keeping with current thinking about teacher education. The paper emphasizes the utility of generating studies involved in gathering all relevant information bearing upon decisions. Criteria applicable in judging evaluation designs are specified.

Suggestions for the construction of evaluation framework are given. One framework is a comprehensive matrix developed for the purpose of generating evaluation questions and studies along new criteria. Another is a consistency analysis matching (1) goals and plans; (2) instructional strategies; and (3) expected performance. The information gathered through the design subsequently become basis for the program's fate.

Descriptors:
Evaluation methods; Models; Program evaluation; Teacher education.

Guba, Egon G.
Evaluation as Decision-Making Tool. Indiana: Indiana University, June, 1970. 31 p. ED 055 362 (AdeM, PCF)

The speech examines three traditional definitions of evaluation, presents a new definition, and describes how this new concept of evaluation functions. Early definitions tended to equate this term with measurement, resulting in scores and other indices capable of statistical manipulation. Though it rendered the handling of masses of data, it gave an instrumental focus to evaluation and obscured the fact that value judgments are necessarily involved. Another definition appeared in connection with determining the congruence between performance and behavioral objectives. A disadvantage of this definition is that the task of the evaluator was viewed as developing a set of objectives that were sufficiently operational so that the required congruence assessment could occur. Another is that the emphasis on student behavior as the criterion, caused evaluation to become a technical technique. Data become available only after a long instructional period. Because of this, it could not be utilized in the ongoing program, i.e., the program from which the evaluative data was extracted.

The new definition calls for educational evaluation as "the process of delineating, obtaining, and providing useful information for judging decision alternatives." The eight key terms, each of which was found to have significant implications for the processes and techniques of evaluation were discussed. The author presents practical applications of this new model and the advantage of the model over traditional forms of evaluation.

Descriptors:
Decision-making; Decision making skills; Evaluation; Evaluation methods; Speeches.

Kennedy, Beth T.
The Role of Criterion-Referenced Measures Within the Total Evaluative Process. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Illinois, April, 1972. 4 p. ED 065 590 (AdeM, PCF)

The primary concern of this paper is to ascertain the extent to which the instructional programs developed under the auspices of the Southwest Educational Development Laboratory produce more specific changes in behavior. Criterion-referenced measures are currently being employed to provide learner performance data. The behaviors falling within the focus of evaluation are defined by specific criteria stated in the instructional objectives of a program.

The results of these performance measures are used to evaluate the performance of a group with respect to the absolute standard. In addition to charting specific growth curves, data from criterion-referenced measures are important in evaluating and revising the program content, in evaluating the efficacy of instructional sequences, and in evaluating competing instructional program and products. The laboratory develops criterion-referenced tests from specified objectives which are directly interpretable in terms of the specific performance standards stated in those objectives. In conclusion, the need to examine the reliability and validity of criterion-referenced measures is cited.

Descriptors:
Criterion referenced tests; Evaluation Methods; Instructional programs; Test reliability; Test validity.

Levine. R.A. & Williams, A.P., Jr.
Making Evaluation Effective: A Guide. California: Rand Corporation, May, 1971, 48 p. ED 058 612, (AdeM, PCF)

This manual was prepared to aid in building an effective evaluation structure for programs and projects of the Departments of Health, Education, and Welfare. It has four objectives: (1) To aid in the planning of evaluation and related activities so that the limited resources available to evaluation offices are utilized where most needed; (2) to aid in carrying out evaluations that would accelerate decision-making; (3) To aid in assessing and improving the total evaluation effort; and (4) to aid in using evaluation as a part of the policy-making process.

The presentation avoids questions of methodology and concentrates on the decision-making context for evaluation. Suggested documentation includes an annual evaluation plan and statement of strategic objectives to be prepared by each evaluation office, a statement of the rationale of each evaluation to be prepared by the initiating office (before and after evaluation), and a critical program summary to be prepared by the chief evaluation officer for each program for which he is responsible. This will be drawn up when needed by program administrators.

Descriptors:
Decision-making educational planning; Evaluation; Evaluation needs; Evaluation techniques; Federal programs; Government roles; Guidelines; Revision making; Program evaluation.

Mervin, Jack C.
Evaluation Designs and Instruments. From Symposium *"The World of Evaluation and Needs Re-Shaping"* at the Annual Meeting of the American Educational Research Association. Minnesota: University of Minnesota, February, 1969. 7p ED 043 680 (AdeM, PCF)

Available designs and instruments for evaluation are not adequate to meet the varied needs of evaluation. Therefore, evaluation needs to be re-shaped in terms of (1) consideration of how and where currently available theories, designs, and instruments are proving useful, (2) identification of needs that cannot be met with currently available constructs and tools, and (3) an attempt to identify guidelines for efforts to meet unfulfilled needs.

In this context, the history of educational testing and evaluation is briefly reviewed and some interesting new ideas noted. The rather recent concepts of formative versus summative evaluation, of fidelity versus a bandwidth of information and of group evaluation versus individual evaluation might be of help to reshape evaluation positively if the needs for evaluation can be examined within a framework of educational decision-making.

Descriptors:
Curriculum evaluation; Decision making; Evaluation; Evaluation methods; Evaluation techniques; Measurement; Measurement goals; Program evaluation; Testing.

Messick, Samuel
The Criterion Problem in the Evaluation of Instruction: Assessing Possible Not Just Intended Outcomes. Paper presented at the Symposium on Problems in the Evaluation of Instruction. Los Angeles: California University, Center for the Study of Evaluation of Instructional Programs, December, 1967. 38p. ED 030 987 (AdeM, PCF)

This paper discusses cognitive styles and affective reactions as two major classes of criterion variables that should be taken into account in the evaluation of instruction. These two types of variables are emphasized because of their relation to questions that should be asked in evaluation studies — questions that stem from particular views about the diversity of human performance and about the role of values in educational research.

The major thrust of the paper's evaluation approach considers other changes in human characteristics and environmental influences active at the same time. When instruction is evaluated in such a multivariate framework, cognitive styles and affective reactions assume particular interest: (1) as personal characteristics that may interact with treatment variables to moderate learning, retention, and transfer, (2) as dispositions to be monitored to detect any possible undesirable side effects of instruction, and (3) as qualities to be fostered either directly as specific objectives of the instructional program or indirectly as products of other efforts. The use of cognitive styles would have relevance for student performance in various subject matter areas, for test construction, and for teaching methods. A possible educational goal would be an attempt to foster alternative modes of cognition and multiple stylistic approaches to problem solving.

Descriptors:
Affective behavior; Bibliographies; Cognitive development; Cognitive processes; Educational objectives; Educational research; Evaluation criteria; Individual differences; Instructional programs; Program evaluation; Values.

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Pyper, John

Critical Elements in Analysis and Revision of Instructional Systems. Paper presented at the Annual Meeting of the California Educational Research Association. California: San Diego, April, 1971. 14p. ED 058 287 (AdeM, PCF)

The purpose of this paper is to outline elements that are critical for an effective analysis and revision of instructional units of a learning system. There is no attempt to present an exhaustive list of elements. The elements that are presented in this paper, although consisting of a first approximation, appear to subsume characteristics that account for most of the ineffectiveness of instructional systems. A model (matrix) presents the elements that comprise the fundamental components of an instructional system: objectives, evaluation, learning activities, management, organization of learning activities, prerequisites, and theoretical rationale. The matrix includes as well the attributes that have been found useful in analysis and revision activities. The attributes are discussed in terms of types of analysis: relevance analysis, motivational analysis, adequacy analysis, and efficiency analysis. The whole model is a distillation of extensive experience in the analysis and revision of an actual individualized, performance-based instructional system that constitutes the entire teacher education program of a School of Education.

Descriptors:

Behavioral objectives; Curriculum evaluation; Curriculum planning; Curriculum problems; Evaluation techniques; Guides; Individualized instruction; Instructional improvement; Instructional innovation; Instructional systems; Models; Relevance (Education); Research and instruction units; Teacher education curriculum; Testing.

Roid, G.H.

Systems Design for Course Evaluation. Paper presented at American Educational Research Association Symposium "Research, Systems Design and the Future of University Course Evaluation", Chicago, Illinois, April, 1972. 43p. ED 064 398 (AdeM, PCF)

It is the thesis of this paper that much of the present concern over course evaluation can be traced to the fact that evaluation has become synonymous with the use of a single questionnaire, instead of the broader process of evaluating the course as an educational program. An attempt is made to redefine course evaluation in the light of recent work on educational evaluation, and suggest a model for a course evaluation system. First, the paper defines terms and delineates the aspects of a course which should be evaluated. This "ideal" is compared with existing course evaluations and the need for new emphasis is explained. A systems design is then presented.

Evaluation is defined "as a process of examining certain existing objects and events in the light of specified value standards for the purpose of making adaptive decisions." Current course evaluations do not specifically relate to specific goals and standards for a particular course. A model evaluation system begins with a specific definition of the purpose of the course evaluation by all those who will use the information and judgments made public from it. An assessment must be made of whether real and significant changes will be possible if evaluation is conducted. Next, the various subgroups served by the course are identified. The intended goals of the course are pinpointed, and an initial list of intended inputs, processes, and outputs for a course drawn up. Observation methods, tests, checklists, simple frequency counts, and other measures which can be pre-designed are constructed. Findings, data, and evaluative judgments are collected in report form and a mini-experiment can be conducted by discussing evaluation reports with decision makers.

Descriptors:

Course evaluation; Course objectives; Evaluation techniques; Measurement instruments; Models; Questionnaires; Systems approach; Test results; Tests.

Stake, Robert

An Approach to the Evaluation of Instructional Programs. Chicago, Illinois: American Educational Research Association, April, 1972. 8 p. ED 064 350 (AdeM, PCF)

The evaluation of an educational program by portrayal of the program rather than the focus of the program is discussed. It is suggested that the program evaluator limit his evaluation aims to what he can do and to what the client needs most. It is believed that the first duty of the evaluator should be to offer the client a comprehensive portrayal of the program.

Descriptors:

Evaluation criteria; Evaluation techniques; Instructional programs; Program content; Program evaluation.

Steele, Sara M. and Moss, Gwenna

The Criteria Problem in Program Evaluation. Paper presented at the Adult Education Research Conference, Minneapolis. February 27-28, 1970. 37p. ED 036 748 (AdeM, PCF)

This study presents the nature and role of criteria in the evaluation of adult education programs. The first half of the paper discusses several premises: (1) The goal of evaluation is to use program judgments in the program decision-making process; (2) Criteria constitute an important part in the evaluation process; (3) Criteria may function at various levels of specificity. The effectiveness of evaluation rests mainly on the quality of the criteria used, and the efficiency of evaluation as determined by the evaluator's competency in developing criteria.

The second half of the paper asserts that criteria are not adequately understood and used. Reasons given include: (1) too narrow a concept of evaluation, (2) too great an emphasis on information and program description, (3) the wish to avoid decision-making; (4) the wish to escape challenge by avoiding subjectivity; and 5) poorly defined guides to data interpretation. This study gives suggestions for improving the use of criteria.

Descriptors:
Adult education programs; Decision making, Evaluation criteria; Evaluation needs; Evaluation techniques; Evaluation thinking; Program design; Program evaluation; Research.

Wallace, Richard C., Jr.; Shavelson, Richard J.

A Systems Analytic Approach to Evaluation: A Heuristic Model and Its Application. Syracuse, New York: Eastern Regional Institute for Education, January, 1970 53 p. ED 058 292. (AdeM, PCF)

This article demonstrates the capabilities and limitations of systems analysis framework as applied to the development of a program evaluation plan. This model is based upon the following theoretical concepts of Cronbach, Scriven, Stake, and Stufflebeam: (1) Evaluation is considered to be a facilitating factor in the decision making process; (2) Both formative and longitudinal studies should assume important roles in the planning of a comprehensive evaluation plan; (3) Intrinsic and mediate evaluation studies are important adjuncts to payoff evaluation; (4) Evaluators must take seriously the task of describing fully all antecedent transaction and outcome data; (5) Evaluation data must have practical value as well as scientific credibility, and must be delivered to decision-makers in time to serve the judgmental process of evaluation. Since the framework of systems analysis can be traced to the General Systems theory (Bertalanffy, 1968), certain tenets of this theory are reviewed to provide a foundation for building the evaluation system.

It is pointed out that systems analysis applied to evaluation provides, at best, a heuristic device for organizing, implementing, and interpreting evaluation efforts. The practical utility of the proposed evaluation systems needs to be ascertained; it has been proven to be helpful to the authors in the construction of evaluation plans. To the extent that it assists evaluators to identify, collect, interpret, and report information of practical value and scientific credibility to decision-makers, it will prove to be a valid technique.

Descriptors:
Decision making; Educational accountability; Educational improvement; Educational needs; Evaluation techniques; Feedback; Formative evaluation; Models; Program evaluation; Research methodology; Summative evaluation; Systems analysis; Systems approach; Systems concepts.

Wardrop, James

Toward a Broader Concept of Educational Assessment. Paper presented at the Second Mardi Gras Symposium. New Orleans: Department of Health, Education & Welfare Office of Education, February, 1972. 28 p. ED 060 062 (AdeM, PCF)

The author begins by delineating the concepts of assessment, measurement, and evaluation. He then traces the development of educational assessment through three stages: (1) the Tylerian model of evaluation; (2) product-oriented assessment; and the most current (3) context evaluation.

The author elaborates on his conception of evaluation in terms of context variables. He defines context variables as the broad spectrum of influences present in the milieu in which an educational program functions. He, however, admits, the need of considering other levels of context variables other than what he suggests.

He concludes by stressing that due to the complex and multi-faceted nature of educational assessment, no assessment can capture all dimensions. He points out that although an evaluation attempts to find out the way things are, these assessments may not always be complete. Thus, the need for a multiplicity of perspectives in educational assessment.

Descriptors:
Criterion referenced test, Educational accountability, Educational improvement; Educational objectives; Educational testing; Evaluation method; Formative evaluation; Measurement Goals; Measurement techniques; Models; Performance contracts; Performance criteria; Standardized tests; Summative evaluation.

METHODOLOGY OF PROGRAM EVALUATION

Periodical

Hawkridge, David G. and Chalupsky, Albert B.

"Evaluating Educational Programs: A Symposium." The Urban Review, III (February, 1969), 10-12. (AdeM)

The paper presents a conceptualization of an identical research and evaluation model. It discusses constraints and limitations found in the real world. Without seriously jeopardizing the necessary research and evaluation function, the author suggests a practical compromise which takes into account these limitations.

The ideal model consists of the following steps: (1) developing testable hypotheses or objectives; (2) designing the experimental treatment or program; (3) selecting the subjects; (4) obtaining measures of treatment effectiveness; (5) drawing conclusions from the data; and (6) modifying or reformulating the educational objectives on the basis of research or evaluation results.

Descriptors:
Research methodology; Evaluation methods.

Book

Pasquiriella, Bernard; Wishik, Samuel

Evaluating Training Effectiveness and Trainee Achievement. New York: International Institute for the Study of Human Reproduction, 1975. 195p. (PCF)

This is a manual designed to be a complete and self-contained guide to objective and achievement testing for purposes of training program evaluation.

The test is arranged to take the reader step-by-step through the procedures of training program evaluation – from designing the test instrument, through the actual administration of the test, coding and scoring and the various statistical analysis that provide the final data for the evaluation. Appendices also contain other aspects of the methodology for readers requiring additional information in designing the achievement instrument and conducting the evaluation.

The evaluative methodology presented provides objective and quantitative feedback to training administrators. It also provides information on the cognitive gains of trainees in the training subject matter.

The following procedural format is employed to assess the effectiveness of instruction in terms of subject matter competence: (1) A pretest constructed to obtain baseline level of competence; (2) A review of the planned instruction made in the light of pretest results; (3) A curriculum audit undertaken to ascertain how much of the subject material assessed by the test items is in fact covered during instruction; (4) A second administration of the same set of objective test items at the end of the training sequence – posttest; and (5) A comparative statistical analysis of pretest and posttest results to assess the effects of training on the levels of competence.

Descriptors:
Training program

Published Reports

Bond, Nicholas A. Jr. and Rigney, Joseph W.

Measurement of Training Outcomes. *Los* Angeles: Department of Psychology, University of Southern California, 1970. 49 p. ED 043 222 (AdeM, PCF)

Measurement of training outcomes is a requirement for evaluating new training techniques, but is one that is different to meet. Managers of training and researchers have different concepts of what they want as favorable outcomes. Classical, statistical and experimental designs assume laboratory rigor of control over variables. This is seldom possible in the real world of a school or classroom.

The effectiveness of the institutions is a current issue of fundamental concern in our society. Training is considered as a form of planned social change. Possibilities for measuring outcomes of training are surveyed. Various approaches are discussed. Illustrations from the Computer Assisted Instruction (CAI) and literature of recent attempts to measure training outcomes are given.

The principal conclusions presented are: (1) that the classical four-way design is impracticable for most evaluation studies in training environment; (2) that a policy of "adaptive research for big effects" is apt to be scientifically and administratively desirable; and (3) that current attempts at measurement of training outcomes shall use fairly simple methods.

Descriptors:
Achievement; Education; Evaluation; Measurement; Research Methodology; Social change; Training; Training objectives; Training techniques.

Colorado University

A Proposal Design for Training Educational Evaluators and Developers. Technical Paper No. 3, Final Report. Boulder: Colorado University, (n.d.). 105p. ED 052 166 (AdeM, PCF)

In this third technical paper, the design for a training program for educational developers and evaluators is explained. Mentioned are: (1) the procedures for which the design was generated; and (2) the salient characteristics of several agencies which make up the consortium. The topics considered in this paper include: (1) a general description of the highlights of the proposed training; (2) the basic assumptions underlying the training program; (3) the objectives of the training program; (4) the elements of the three-level training program (Ph. D. program, MA program, and intensive training institutes); (5) the staff who will be associated with the program; (6) the recruitment and selection of the trainees; (7) the materials development proposed; (8) the evaluation plan for the training program, and (9) the administrative, monitoring, and cost accounting elements of the training system.

Descriptors:
Consortia; Educational development; Educational programs; Evaluation methods; Teacher education.

Glassner, Leonard E.

Handbook for Evaluators. *Pittsburg:* Public Schools P.A. Office of Research, October, 1969. 62 p. ED 035 980 (AdeM, PCF)

This handbook, designed as a guide for new evaluators in the Pittsburg Public Schools, provides an orientation to the "Discrepancy Evaluation Model." As the first of two volumes, the handbook has two principal objectives: first, to orient the new evaluator to the philosophy of evaluation inherent in the discrepancy model; and second; to outline in detail the routine administrative processes necessary to conduct day-to-day activities in the first two stages of evaluation.

The handbook necessarily makes repeated references to specific regulations, documents, and procedures of the Pittsburg Public Schools. Nevertheless, it has been written so that it can be easily adapted to any school system which subscribes to the concept of evaluation set forth in the discrepancy model. For it is the model's underlying logic, applicable to educational programs in general, that has led to the detached evaluation procedure and duties described in the present volume. Guidelines for use during the first stage of evaluation stress the need for coordination between the evaluator and the program staff while planning, generating, and amending the program evaluation design. Stage II guidelines specify requirements for implementing the evaluation design developed in Stage I. The appendix includes summaries of completed evaluations of the Pittsburg Kindergarten program.

Descriptors:
Data collection; Evaluation methods; Evaluation techniques; Field studies; Guidelines; Inservice programs; Measurement techniques; Models; Program design; Program evaluation; Program planning; Research, Methodology; Sensitivity training.

Gold, Ben K.

Evaluation of Programs. Texas: Texas College, April 1971. 20p. ED 048 845 (AdeM, PCF)

Evaluation in its true concept should be a process of collecting information, to make better decisions. The author discusses in detail four planning stages to evaluate program. The first stage of the process is to ascertain the decision areas of concern. The philosophical principles of any college suggest the kinds of behavior patterns, the types of values and ideals, and the habits and practices that the program will be aimed at. From these principles are derived the general goals of the program. These goals will guide the choice of activities to be included in the program and from these goals should flow the specific objectives of the program. It is suggested that under this planning stage the program evaluator be included to make sure that the program objectives finally agreed upon will be stated in a form amenable to evaluation.

In the second stage, the evaluator must select the appropriate information - gathering instruments. Here one should consider whether to find out information through written questionnaires or personal interviews. One can also look at available standardized tests or consider such attitude scales as the Thurstone scale, Likert scale, or the "semantic differential" scale.

In the third stage, the data must be collected and analyzed in advance of the decision-making deadline. Since evaluation is to aid decision-makers, it will not benefit the decision-makers if information comes today and the decision was yesterday. The evaluator and the decision-maker should be in constant contact so that the evaluator will know in time when data must be collected. The final step is reporting findings to the decision-maker in a form that he can read and understand. The decision-maker must be able to scan the evaluator's report and pick out the salient points. The author concludes his paper by offering eight references on the subject of evaluation.

Descriptors:
Evaluation; Evaluation criteria; Evaluation methods; Evaluation techniques; Inspection; Junior Colleges; Measurement; Program evaluation.

Klein, Stephen and Others.

Procedures for Needs - Assessment Evaluation: A Symposium. California: Los Angeles Center for the Study of Evaluation, May, 1971, 63p. ED 055 111 AdeM, PCF)

This is a compilation of symposium topics on procedures for needs-assessment evaluation. "Choosing Needs for Needs Assessment" by Stephen P. Klein and "Selecting Tests to Assess the Needs" by Ralph Hoepfner were chosen to be abstracted.

Klin's paper presents a new technique for conducting the initial steps of a needs assessment - that of continuing a comprehensive set of goals or objectives by experts who have the time, knowledge, and resources to fully cover the field of potentially relevant goals and objectives. In the second process, appropriate individuals select from appropriate lists, goals relevant for their particular situation.

The Hoepfner paper discusses the criteria for a test evaluation system. The system labeled the "MEAN'A" method has the following criteria: measurement validity, examinee appropriateness, administrative usuability and normal technical excellence. The aforesaid criteria are designed to apply to measurement devices.

Descriptors:
Decision making; Educational needs; Educational objectives; Elementary schools; Evaluation criteria; Evaluation techniques; Models; Norms; Principles; Resource allocations; Symposia; Test reliability; Test selection; Test validity.

Smith, Louis M.

Participant Observation and Evaluation Strategies. *From Symposium "Participant Observation and Curriculum: Research and Evaluation,"* American Educational Research Association, New York, February, 1971. 11p. ED 048 339. (PCF)

This paper explores participant observation as a research and evaluation strategy in dealing with complex educational settings, organizations, and curricula. Alternative models are presented. The first is a general structural model involving three research strategies: (1) An experimental design with pre and posttest of achievement, control groups, and inferential statistics; (2) a social survey with interviews and questionnaires, random sampling of program relevant individuals (teachers, parents, and pupils), quantification, and cross tabulation of response; and (3) A participant observer study of the program. The second model is a sequential model which attempts to cumulate efforts over time rather than concurrently in time. This model is illustrated in some detail by use of a study on teacher awareness. The third strategy of participant observation and curriculum evaluation is the cumulation of case studies.

Descriptors:
Case studies (Education); Classroom observation techniques; Curriculum evaluation; Elementary school curriculum; Evaluation techniques; Models; Parcipant involvement; Program evaluation; Research methodology; Social studies; Teacher characteristics.

Suchman, Edward A.
"Evaluating Educational Programs: A Symposium." *The Urban Review,* III (February, 1969), 15-17. (AdeM, PCF)

An evaluation study is more than a "pass or fail" activity. It should attempt to work on a researchable goal - that of finding out why a program was or was not effective. The "why" of the matter involves an analysis of factors and conditions affecting success or failure.

The author then elaborates on the parallelism between evaluation and research. He does this by assuming that like non-evaluative research, evaluation tests the hypothesis and finds out: (1) whether it was really the program that achieved the program's objective; and (2) how and why the program was able to achieve the objective. It is particularly in the second area where he applies multicausal models. By using this approach he proves that evaluation is research.

Descriptors:
Research methodology; Evaluation method.

Woodward, Jane P. and Yeager, John L.
Evaluation of Programs To Train Educational R & D Personnel. Paper presented at the Annual Meeting of the AERA, Chicago, Illinois, April, 1972. Pennsylvania: Learning Research and Development Center Pittsburgh University, 1972. 26p. ED 064 376 (AdeM, PCF)

A discussion is given of the formative evaluation process as it was conceptualized and conducted to assess the R & D training program under development. Included are a discussion of the evaluation context, the evaluation model, the procedures and instruments developed and implemented and their success, the types of evaluation problems encountered and those conclusions and recommendations which evolved from the project evaluation staff's experience with the formative evaluation effort. The context of the R & D training program evaluation posed a particularly interesting setting and problem for the design and conduct of evaluation. The field of training for the program being developed was relatively undefined in terms of formal conceptualization and existence of research.

The model, the CIPP model, comprises four steps: context evaluation, input evaluation, process evaluation and product evaluation. Evaluation procedures include monitoring techniques, student opinion self-report techniques, achievement assessment techniques, and student attitude assessments. Results showed that: (1) Too much time was spent on evaluation activities requesting redundant data; (2) Oral feedback was preferable; and (3) Time was a problem in the evaluation procedure. Conclusions were: (1) Formative evaluation must be "adaptive" evaluation; (2) The planning of the evaluation design and procedures must take into account any known characteristics of the particular students who comprise the pilot test group; and (3) The CIPP model can serve as a useful base for an overall program evaluation design.

Descriptors:
Concept teaching; Educational programs; Evaluation techniques; Models; Problem solving; Program evaluation; Research and Instruction units; Staff orientation.

United States Civil Service Commission.
Training Evaluation: A Guide to its Planning, Developing, and Use in Agency Training Courses. Washington, D.C.: U.S. Government Printing Office, May, 1971. 21 p. ED 054 365 (AdeM, PCF)

This paper describes one approach which can be used by an agency training specialist to assess the effectiveness of many of their internally developed and conducted training courses. It offers a conceptual framework and model for evaluation following the concept of "quality control" in industry. The three steps necessary to establish a quality control system and which are modified to the training process are: (1) identification of control areas (which are identical to the establishment of training objectives); (2) determination of standards of quality (equivalent to the determination of what is the standards of training projects); and (3) systematic evaluation (which is equated with the construction of instruments for assessing trainee progress, periodic administration of these instruments, analysis and interpretation of data obtained, and feedback of results to training specialists and agency management for use in making needed course adjustments).

The essential steps in developing training objectives are also presented namely: (1) determining what general improvements or changes are desired; (2) selecting from the total improvements or changes desired those which would best be learned in the training course; (3) identifying the particular skills and knowledges which will lead to the desired performance; and (4) developing training objectives by describing the action or behavior expected of the trainee as a result of the training evaluation process incorporating all three steps of the quality control system in sequence. It then describes how to develop and use direct and indirect measurement instruments for collection of evaluative data about trainee progress. The paper concludes with a discussion of the factors to be considered when implementing the kind of evaluation program described in this paper.

Descriptors:
Administrator guides; Conceptual schemes; Data collection; Evaluation methods; In-plant programs; Planning; Program descriptions; Program evaluation; System approach; Training objectives; Vocation follow-up.

PROGRAM EVALUATION MODELS

Books

Gane, Christopher

Managing the Training Function. London: George Allen and Unwin Ltd. 1972. 178 p. (PCF)

The field of training has been proven to be moving at such a rapid pace that no one generally accepted scheme is known about it. The book is aimed at presenting training principles thereby showing that although grappled by clusters of training ideas and problems one may still feel his way in the minifield of the training world. The author does this by supporting a systems approach to training.

The delineation of the manager's cyclic training job is enumerated as: (1) defining the problem; (2) arranging the problems in order of priority; (3) analyzing each problem to determine the best combination of organizational change, selecting of training procedures; (4) producing a target population analysis, task analysis and performance analysis; (5) designing the training process; (6) assembling the resources and implementing the process, and most crucial of all, (7) evaluating the results at various points of the cycle. The seventh step involves assessments on the extent to which training measures taken have actually closed performance gaps. Assessment activities on the following aspects are given: (1) pre-training characteristics; (2) on-the-training performance; (3) end of training performance, and (4) on-the-job performance. If an unacceptable performance gap still remains, information from evaluation must be fed back for action to the appropriate point in the cycle.

Descriptors:
Training; Training techniques; Educational programs; Training laboratories.

Hamblin, A. C.

Evaluation and Control of Training. London: McGraw Hill Book Co., 1974. 200 p. (PCF)

The book is concerned with evaluation and control of training experiences. It argues that training should as much as possible be evaluated in terms of pre-defined objectives and that these objectives be communicated to and, if possible, be agreed on by the trainees. A model of the evaluation process is defined and explained. The model operates on five levels of evaluation: (1) reaction level; (2) learning level; (3) job behavior level; (4) organization level; and (5) ultimate value level. Types of strategies and the range of techniques at each evaluation level are discussed.

The author seeks to stimulate readers and arouse their interest, in order that: (1) they may acquire a clearer mental map of the field of training; (2) they may be able to plot their own present position and decide on their future direction; (3) they may acquire a clearer understanding of evaluation problems and strategies to overcome these problems; (4) they may acquaint themselves with the range of techniques available for evaluating training; (5) their attitude towards evaluation and control of training may become more rational, critical and objective; and (6) they may be able to apply knowledge in the form of changed behavior on the job, by changing some of their evaluation practices.

Descriptors:
Evaluation methods; Evaluation techniques; Evaluation.

Hickerson, Francine & John Middleton.
Helping People Learn: A Module for Trainers. A Professional and Development Module, a Module Text. Honolulu, Hawaii: East-West Communication Institute, 1975. 309 p. (PCF)

The module text is aimed at presenting a systematic approach to training. It deals with basic essential principles of training and educational psychology. It is furthermore designed to help relatively inexperienced trainers acquire demonstrable expertise upon completion of the text and the exercise book that accompanies it.

Briefly, the modular course consist of six units built around a discrepancy model with six phases in the training process. The model seeks to represent and simplify directional actions which trainers can adopt for planning, implementing, and evaluating a training program.

The module text is one of three training development materials produced by the institute. These materials consist of: an Exercise Book containing a number of structural group and individual practice exercises designed for use along with the text; and a Module Manager's Guide containing suggested schedules, supplementary materials, suggestions for adaptation, lesson plans and pre-post tests evaluations for the individual who will implement the module.

Descriptors:
Training programs Trainees

Periodical

Pyatte, Jeff
"Functions of Program Evaluation and Evaluation Models in Education." *The High School Journal.* LIII (April, 1970), 385-399. (AdeM)

Evaluation is defined as the deliberate act of gathering and processing information according to some rational plan. The purpose of the process is to render at some point in time a judgment in the worth of the program. The definition includes six elements of evaluation: the evaluator; the program evaluated; elements of information processed; the rational process to which information is subjected; the time; and judgment rendered.

The rational plan as presented above suggests a model which is a means of representing a system. It is categorized into the formal and concrete. Models have been put into use as a place in the evolutionary or developmental process of a discipline such as education.

Models have their limitations: 1) Exact correspondence between a model and the situation in reality is hard to achieve; and 2) the large number of models from which to choose makes the task of decision makers more difficult. However, trying out new ones and examining old ones have led to new discoveries.

The author then briefly describes two examples of evaluation models: one developed to evaluate the curriculum of the American Association for the Advancement of Science (AAAS) and one developed by Popham to compare instructional sequences with dissimilar objectives.

Descriptors:
Program evaluation and planning; Programs-evaluation; Models.

Published
Reports

Alkin, Marvin C.
Towards an Evaluation Model – A Systems Approach. Los Angeles: California University, August, 1967. 27 p. ED 014 150 (AdeM, PCF)

It is the function of this paper to specify through verbal and figurative representation (in the form of a model), what the author feels should be observed and judged in evaluating instructional programs.

Evaluation is defined as "the process of identifying, quantifying the relationships between student inputs and educational outputs, and determining the combination of mediating factors which maximizes the educational outputs, given a constant financial input and controlling for the effects of internal systems." A model for evaluating instructional programs at the school district level is then developed. The model is basically an amplification and discussion of the definition of "evaluation".

Six groups of elements that make up the evaluation model are discussed in a macrosystem. These are: (1) student inputs; (2) financial inputs; (3) external systems; (4) mediating factors; (5) student outputs; and (6) nonstudent outputs. The mediating variables are assumed to be the only set of variables which can be manipulated - that is, they are subject to change or manipulation by education decision-makers at all levels. However, there is no definite evidence indicating the combination of mediating variables most effective in achieving the objectives of the school (i.e., in producing desired educational outputs.)

Descriptors:
Evaluation, Instructional programs; Models; Input output; School districts; Methodology; Systems analysis; Program budgeting; Social environment; Economic factors; Political attitudes; School organization; Cost effectiveness; Equal education; Student characteristics;

Alkin, Marvin C. and Wooley, Dole C.
A Model for Educational Evaluation. Paper presented for PLEDGE Conference, San Dimas, October 8-11, 1969. 12 p. ED 036 898 (AdeM, PCF)

This paper attempts to discuss a basic model for the evaluation of educational systems and instructional programs. The assumptions leading to the development of a comprehensive definition of evaluation and the definition itself is presented. Evaluation is defined as "the process of ascertaining the decision areas of concern, selecting appropriate information, and collecting and analyzing information in order to report summary data useful to decision makers in selecting among alternatives." The assumptions and definition are closely tied to the decision-making process, which in turn leads to a consideration of the kinds of educational decisions required in evaluative information. These decision areas in need of evaluation include: (1) systems assessment of the range and specificity of educational objectives; (2) program planning; (3) program implementation; (4) program improvement; and (5) program certification or generalizability to other situations.

Two feedback loops are explained to distinguish particular evaluation and decision elements for educational systems and instructional programs. In terms of the need areas, one can view the evaluation of instructional programs during the last three areas. In evaluating any educational system, the determination of educational needs in terms of objectives is necessary; it also provides information on the progress of the system relative to these dimensions (System Assessment). The decision maker is then concerned with the selection of programs to meet this objective. Evaluation information might be sought relative to the possible impact of various courses of action or programs (Program Planning). These two feedback models are then compared with the Corrigan-Kaufman six-step problem-solving model.

Descriptors:
Decision-making; Educational objectives; Evaluation; Evaluation methods; Instructional programs; Models; Research and development centers; School systems.

Hartwig, Keith E.
A Basic Model for Planning, Monitoring, and Evaluating Educational Programs. February, 1971. ED 053 196 (AdeM, PCF)

This paper presents a brief description of a basic model for planning, monitoring, and evaluating educational programs using managerial concepts. The model involves the use of five steps as follows: (1) identification of a need; (2) statement of desired outcomes (objectives); (3) the development of a program, including processes and resources; (4) on-going evaluation (monitoring); and (5) terminal evaluation. This simple, basic model for planning, monitoring, and evaluating educational programs is in the developmental stage, and is by no means complete, nor is it represented to be complete. It is a system that has been found useful in presenting a management approach to education for teachers and school administrators. The model is judgmental in the sense that judgments are made at critical points as to whether one continues to the next step or recycles his thinking. These judgment points are denoted by circles on the schematic diagram attached to this paper.

Descriptors:
Educational needs; Educational planning; Educational programs; Evaluation methods; Management systems; Models; Program evaluation; Program planning; School personnel.

Luft, Max and Others
The Quality Assurance Model for Process Evaluation. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Illinois, April 3-7, 1972. New Mexico: Southwestern Cooperative Educational Lab., 1972. 25 p. ED 065 556. (AdeM, PCF)

To facilitate the role of the educational administrator as an evaluator, the Southwestern Cooperative Educational Laboratory (SWCEL) has developed the Quality Assurance Model for Process Evaluation. The aim is to provide educational administrators with an opportunity to maximize the desired terminal behavior of educational programs. Highlighting this technique is an evaluation scheme that provides constant feedback regarding success of program objectives. This is made possible by isolating instances of program failure and providing prescriptive feedback for these cases and by identifying successful educational techniques. The model permits varying degrees of time and financial commitment by utilizing an approach allowing the administrator to select which among the three phases of the evaluation model he feels he can adequately implement within given constraints of program time, and money. Portions of the model have been used by over 50 educational administrators working with 500 teachers in a six-state area in the Southwest. Several different programs have found it successful. Its adaptability to most any program or curriculum makes it important to existing educational administrators and those preparing for roles that will require skill in project evaluation.

Descriptors:
Academic achievement; Behavior objectives; Classroom observation, Techniques; Educational objectives; Evaluation methods; Formative evaluation; Models; Performance tests; Program evaluations; Quality control; Standardized tests; Student behavior; Student evaluation; Teacher behavior.

Provus, Malcolm M

The Discrepancy Evaluation Model: An Approach to Local Program Improvement and Development, Pittsburgh Public Schools. Washington, D.C.: Bureau of Research, Office of Education, 1969. 107 p. ED 030 957 (AdeM, PCF)

A scheme for the evaluation of Elementary and Secondary Education Act (ESEA) Title I and III programs is based upon the view that evaluation should be considered as a process for program development and stabilization. Following a general systems approach and applying management theory, the model includes methods for using evaluation as a program improvement tool. It regards educational performance as an output produced by the interaction of educational inputs (e.g. students, teachers, and materials) with the educational process.

The model incorporates five stages of evaluation: (1) Program design; (2) Program operation; (3) Program interim products; (4) Program terminal products; and (5) Program cost. Each stage of the model is explained and guides to assist in decision making by the program administrator are formulated. A Program Interim Assessment Profile charts the evaluation of a program with respect to comprehensiveness, internal consistency, program compatibility, program implementation, relation of process to outcomes, program effectiveness, and program efficiency.

Seven appendices relate the application of the evaluation model to an illustrative case history, the Standard Speech Development Program, serving 5,000 seventh and eighth grade students in 37 qualifying schools. A bibliography of 18 items is included.

Descriptors:
Bibliographies; Educationally disadvantaged; Educational programs; Evaluation criteria; Evaluation methods; Models; Program development; Program evaluation; Program improvement; Speech education; Urban schools.

Stufflebeam, Daniel

Evaluation as Enlightenment for Decision-Making. Columbus: Ohio State University, January, 1968. 52 p. ED 048 333 (AdeM, PCF)

The paper expresses the need for competent formal evaluation programs, particularly for current programs of educational change. It presents a state of the art in educational evaluation describing current requirements for educational evaluation. It points out that educators have been ineffective in their attempts to meet these requirements and cites some possible reasons for poor evaluations in education. It attempts to conceptualize some alternative approaches to educational evaluation. Evaluation is defined in general terms to analyze emergent problems of educational change, and to identify the types of decisions for which evaluations are needed in these programs.

Four strategies for evaluating educational programs are outlined. These include context, input, process, and product evaluation, each being used in distinct stages in program development. Finally, a general guide for developing evaluation designs to implement a given evaluation program is provided. The logical structure of evaluation design consists of: (1) focusing the evaluation; (2) collection of information; (3) organization of information; (4) analysis of information; (5) reporting of information; and (6) administration of the evaluation.

Descriptors:
Decision making; Educational accountability; Educational change; Evaluation; Evaluation criteria; Evaluation needs; Evaluation techniques; Guides; Models; Program evaluation; Research design; Research problems.

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Published Reports

Bellack, Arno

Methods of Observing Classroom Behavior of Teachers and Students. New York: Columbia University, November, 1968. 38p. ED 040 113 (AdeM, PCF)

This paper presents a discussion of developments in methods of observing behavior of students and teachers in regular classroom settings. The discussion is in three parts: an analysis of the task of constructing a system for observing classroom activities; brief descriptions of illustrative observation systems; and, exploration of certain issues and problems in the development and use of systems for analyzing teacher and student behavior.

In constructing a system for observing classroom behavior, the researcher is faced with two basic questions: what classroom behaviors are to be observed, and how the observations are to be carried out. Consideration should be given in developing a reliable and valid instrument in the form of rating scales or an observation system which specifies in operational terms behaviors to be rated or categorized.

Three illustrations of observation systems are discussed: Flander's system of classroom interaction analysis, an affective system dealing with the social climate of the classroom; Bellack's system for analyzing the language of the classroom, concerned primarily with cognitive dimensions of teaching; and Oliver and Shaver's system for describing teaching styles in social studies classrooms, a multi-dimensional system which focuses attention on affective and cognitive aspects of classroom activities.

The rationale for using classroom observation systems in teacher training is given. Systems theoretically based on teaching behaviors helpful in contributing growth to pupil, provide a mirror for the teacher to obtain feedback about his own teaching behavior along the dimensions of the particular system used. This supplies the chance to learn new behavior and thus expand the teacher behavior repertoire in ways not ordinarily available to teachers.

Descriptors:

Behavioral science research; Classroom observation techniques; Classroom research; Educational psychology; Educational research; Educational sociology; Group behavior; Group dynamics; Interaction; Interaction process analysis; Research design; Research methodology; Student teacher relationship; Teacher evaluation; Test selection; Test validity.

Galloway, Charles M.

The Nonverbal: An Approach for Supervisors. Columbus: Ohio State Department of Education, January 27, 1972. 24 p. ED 064 800 AdeM, PCF)

This report emphasizes the importance of nonverbal behavior as a teacher-student relationship language, and discusses some observation instruments designed to provide feedback to teachers on their nonverbal behavior. According to the report, nonverbal behaviors provide the primary vehicle for expressing emotion and leakage channels that are difficult to control or to censor. Nonverbal cues function as qualifiers in the form of metacommunicative messages to indicate how verbal statements ought to be understood.

It is the supervisor's responsibility to share with the teacher his observations of the non-verbal behavior. The report notes that teachers tend to be defensive about observations with which they disagree, and that observations and evaluations of nonverbal phenomena seem to dramatize these value differences. The utility of the observation system, the validity of which both supervisor and teacher agree upon, is that it removes the difficulty of value differences.

Descriptors:

Class observation techniques; Educational research; Interaction process analysis; Lesson observation criteria; Microteaching; Nonverbal ability; Nonverbal relationship; Supervisors; Teacher-Administrator relationship; Teacher behavior; Teacher supervisor video tape recordings.

McKinney, Floyd L. and Oglesby, Charles

Developing and Conducting Follow-Up Studies of Former Students. Lexington: Kentucky Research Coordinating Unit, September, 1971. 32 p. ED 056 240 (AdeM, PCF)

This document was prepared to assist those individuals and groups interested in conducting follow-up studies of former students. A follow-up study is a procedure for accumulating pertinent data from or about individuals after they have had similar or comparable experiences. The decision whether or not to conduct a follow-up study must evolve from the objectives of the total evaluation effort. Having determined the objectives, one can proceed to identify the kinds of information needed to answer the questions raised by the educational program objectives.

A follow-up study makes use of several selected procedures for information gathering. Aside from obtaining information that would be useful in determining the extent to which the objectives of the educational system are met, the follow-up study can act as a motivating force for change – addition of new programs, deletion of others or revision of existing programs – since a number of groups and individuals are involved. The follow-up study has the potential to uncover conflicts that exist in the overall educational community.

Other purposes of the follow-up study are taken up in the document. In determining the best follow-up procedure, the following should be considered: (1) what kind of data are needed?; (2) how much data are to be obtained?; (3) what are the sources of data?; (4) how much time is available?; (5) what is the size of the group(s) to be studied?; (6) how much money is available?; and (7) what is the availability and competence of the staff? In developing the follow-up instrument, one could state the program objective in such a way that an answer is called for which will help measure the attainment of that objective (criteria question). Following the statement of criterion questions, the next step is to develop or select as many instrument items as will be needed to obtain sufficient information for answering the criterion questions. Pilot application of the instrument is suggested to increase the reliability. Procedures for conducting the follow-up as well as locating respondents are discussed. The authors then recommend combining results of follow-up studies with other findings to reach sound recommendations for the educational system.

Descriptors:
Dropouts; Follow-up studies; Graduate surveys; Guidelines; Methods; Program development; Program effectiveness; Program evaluation; Techniques; Vocational education.

Miller, C. Dean and Hasse, Richard F.

Student Evaluation of Teachers Competence and Effectiveness. Colorado: Colorado State University, 1967. 15 p. ED 012 708 (AdeM, PCF)

Two points of view on what makes an effective teacher are evaluated. That knowledge of one's subject is enough to make an effective teacher was questioned by Neidt's study of changes in attitudes during learning. Continuous interaction between the learner's attitudes and achievements (progressive disenchantments became more pronounced as learning progressed) was evident. The quasimystical view of teaching as an "art" was placed in doubt by the work of Allen (and others) in microteaching, which used student ratings of teachers. Results showed that teachers trained with access to student appraisal improved more significantly than those without, and that student ratings were the most stable and reliable measures (more reliable than the ratings of supervisors). Clerical work in soliciting student evaluations could be diminished by the use of data-processable forms (examples are included in this paper) by professors and teachers. Gathering this information over a period of years would yield valuable normative data. Related data include: (1) The teacher as sole authority on selection and presentation of information and evaluation of his own effectiveness (2) Denial of opportunities for students to assume more responsibility for educational growth and the evaluation of learning; (3) Student failure to provide teacher stimulation; and (4) Different student and teacher conceptions of courses.

Descriptors:
Bibliographies; Data processing; Effective teaching; Evaluation techniques; Microteaching; Student attitudes; Student teacher relationship; Teacher evaluation; Dallas, American Personnel and Guidance Association.

Ryans, David G.

Teacher Evaluation Research, Part I: Consideration of Basic issues, Feasibility of Collaborative Research, and Overall Design, Final Report. Honolulu: Education Research and Development Center. 1971. 37 p. ED 055 991 (AdeM, PCF)

This report briefly reviews research on teacher effectiveness and presents the conclusions of a two-day conference held in October 1969. The conference considered issues related to the assessment of teacher effectiveness and made recommendations to the US Office of Education (USOE) regarding the encouragement of research in this area.

The committee concluded that USOE should encourage and support a large-scale systematic approach to research on teacher effectiveness. This includes the development and testing of measurement instruments which allow for cultural diversity and varying criteria. These instruments would be used in descriptive research to identify teacher and student characteristics and behaviors. These in turn would assess effects, changes, and relationships that may result from identifiable teacher education experiences.

Descriptors:
Cultural pluralism; Educational research; Effective teaching; Evaluation criteria, Evaluation methods; Measurement instruments; Teacher behavior; Teacher evaluation.

Seager, G. Bradley, Jr.

Evaluation of a Diagnostic Instrument of Supervision. Paper presented at the Annual Meeting of the American Educational Research Association, New York, February, 1971. 16p. ED 052 222 (AdeM, PCF)

The paper presents contemporary instructional supervision as a resource to be managed by teachers for the improvement of instruction and for their professional development. Hierarchical distinctions make it difficult for supervisors to accept the concept that their participation in the supervisory process should be managed by the teachers with whom they work. Supervisors are handicapped by the general lack of adequate solutions to four major research problems on teaching effectiveness: (1) operational definition of teaching effectiveness; (2) systematic description of teaching behavior; (3) systematic observation of teaching behavior; and (4) systematic modification of teaching behavior in specific directions. These problems are discussed.

Also presented is the Diagnostic Instrument of Supervision (DIOS) developed by Seager to assist in the identification of strengths and weaknesses of individual classes in facilitating instructional improvement. Its development and evaluation are discussed. It was concluded that while teachers and supervisors use DIOS results in their planning, they have difficulty effecting changes which provide more favorable student responses. More powerful supervisory techniques in planning with teachers (which are available but seldom called upon) could be expected to increase the benefits teachers and supervisors can derive from DIOS.

Descriptors:

Behavior change; Diagnostic tests; Educational change; Effective teaching; Instructional improvement; Student teacher relationship; Supervisory activities; Supervisory training; Teacher behavior; Teacher evaluation; Teacher improvement; Teacher role.

Smith, Floyd R. and Stolarz, Theodore J.

Evaluative Follow-up of Teacher Corps Interns: An Analysis of Teacher Behavior, Final report. Chicago, Illinois: Chicago Association of Colleges and Universities, April 1972. 78 p. ED 063 278 (AdeM, PCF)

This study is a systematic follow-up undertaken by the Chicago Consortium to evaluate the classroom performance of its graduates. Influences about their effectiveness were made through assessments of their observed behavior, using the Classroom Observation Record (COR) and the Flanders Interaction Analysis Categories (FIAC). Trained observers observed each graduate intern two times. They also obtained data on two control groups matched on important variables for comparative purposes: (a) a random selection of teachers with similar experience, and (b) experienced teachers who were described as superior.

Outcomes of the study are as follows: no significant differences were found between the graduate interns and the two control groups of the FIAC. Significant differences, ranking superior teachers first and graduate interns second, were found on the major variables of the COR. The most striking result was the sameness of the three study groups on the FIAC. Also noteworthy was the inability of the superior teachers to display any of the distinguishing features of other superior groups cited in the research. The feasibility of using school system personnel as observers was demonstrated. Further research and innovative programs are recommended. A 32-item bibliography, tables, figures, and appendices are included.

Descriptors:

Educational improvement; Follow-up studies; Performance criteria; Teacher behavior; Teacher evaluation.

Speicher, Dean

Can Teacher Evaluation be Made Meaningful? Paper presented at the American Association of School Administrators Annual Meeting, Atlantic City, New Jersey, 1972. 14 p. ED 060 575 (AdeM, PCF)

This paper presents, in outline form, highlights from the American Association of School Administrators annual meeting clinic on teacher evaluation. The first section is an overview of teacher evaluation which includes personnel appraisal, modern concepts of supervision, status of personnel appraisal, and selecting the criteria for evaluation of instructional personnel. The next section deals with the components of an effective evaluation plan for instructional personnel. The teacher evaluation design which the author recommends for further study can be divided into four basic components: job specification, descriptions of indicators of effective teaching, setting up of instructional and self-development objectives and assessment of instructional performance.

In conclusion, a strategy for developing an effective teacher evaluation plan in the school system is presented. There are two basic steps involved. Begin by developing a review of research and literature related to evaluation of instructional personnel. Then involve teachers, administrators, and school board members in the planning and development of the appraisal plan.

Descriptors:

Board of Education Policy; Board of Education; Effective teaching; Evaluation criteria; Evaluation methods; Guidelines; Instructional improvement; Speeches; Teacher evaluation; Teacher supervision.